



Louisiana's 2012 Coastal Master Plan



committed to **our coast**

MASTER PLAN PUBLIC HEARINGS

New Orleans, Houma, Lake Charles, LA

January 23rd – 25th, 2012



Louisiana is Experiencing a Coastal Crisis

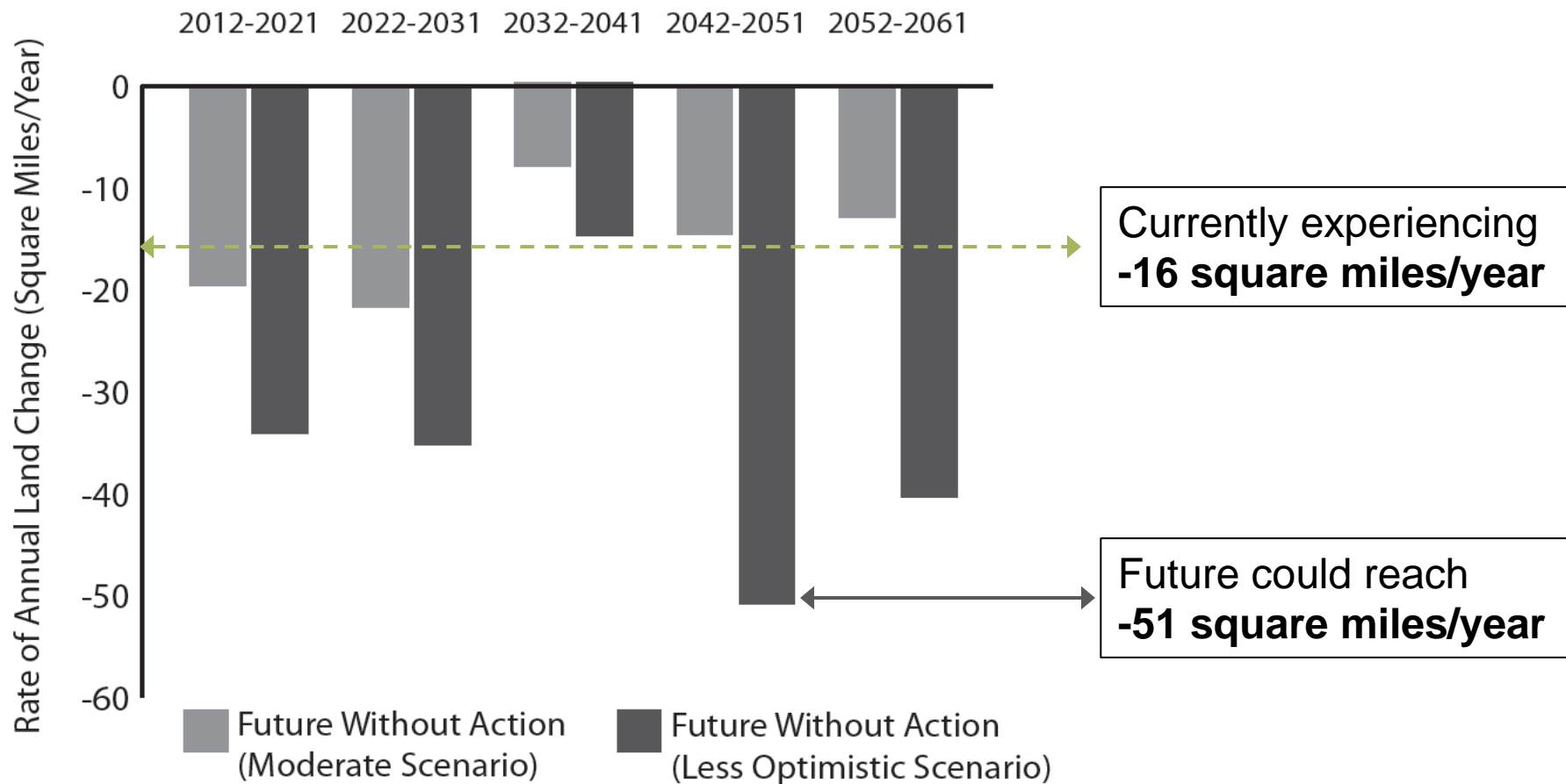
Predicted Land Change Over Next 50 Years



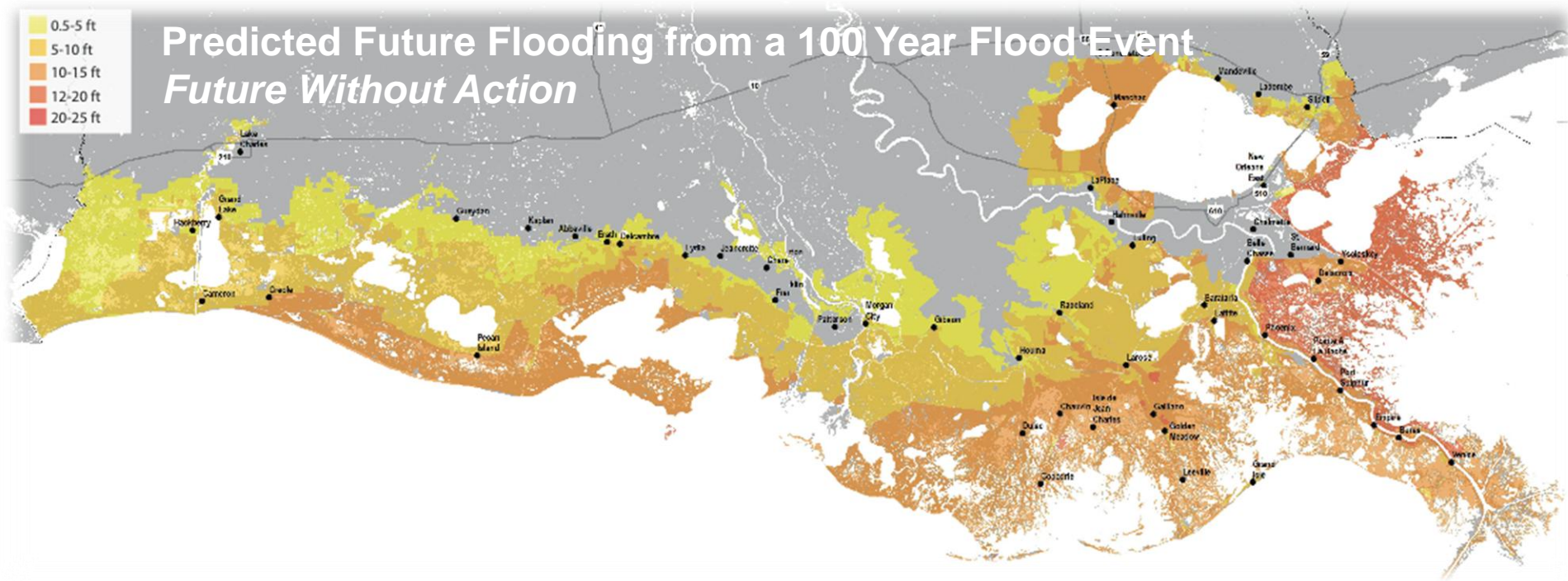
Potential to lose an additional 771 – 1,756 square miles of land over the next 50 years

Louisiana is Experiencing a Coastal Crisis

Predicted Annual Rates of Land Change with No Action over Next 50 Years



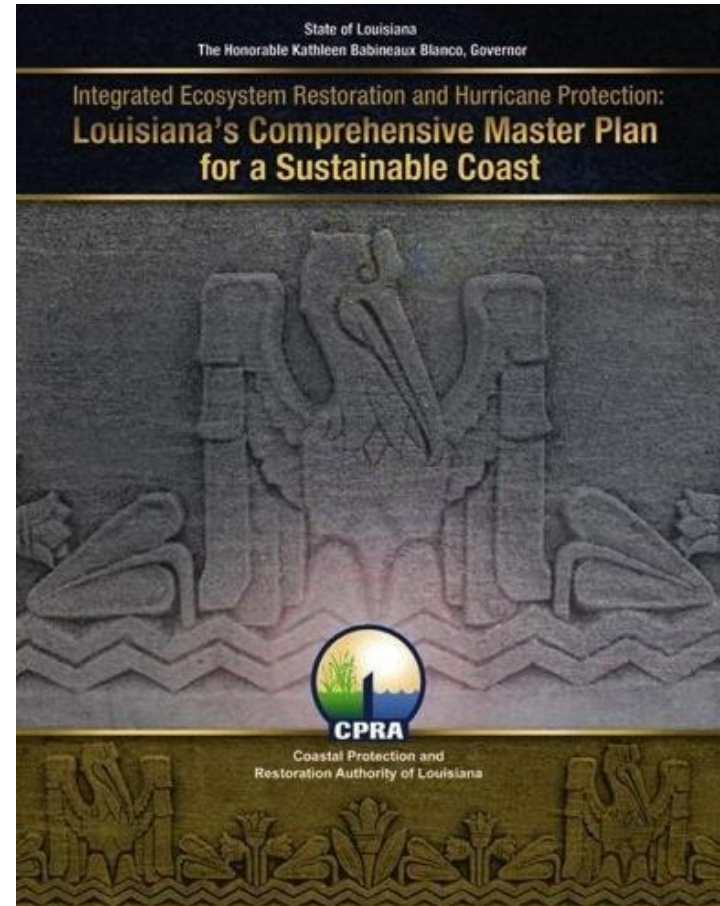
Our Communities and Livelihoods at Risk



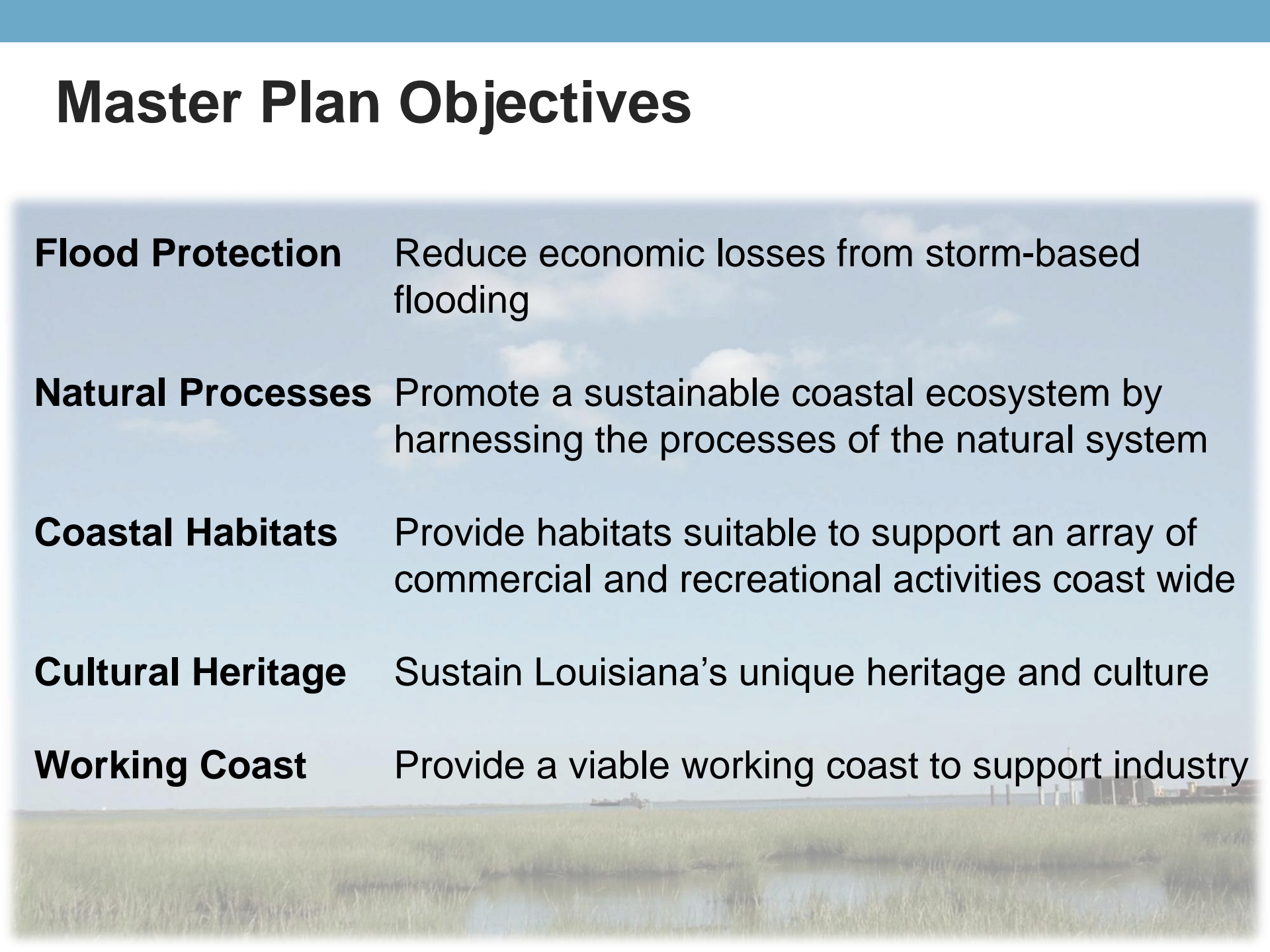
Potential for expected annual damages to reach **\$7.7 to \$23.4 billion**

Why Do We Need Another Plan?

- Legislatively required five year update to the first coastal master plan published in 2007
- Builds on previous efforts

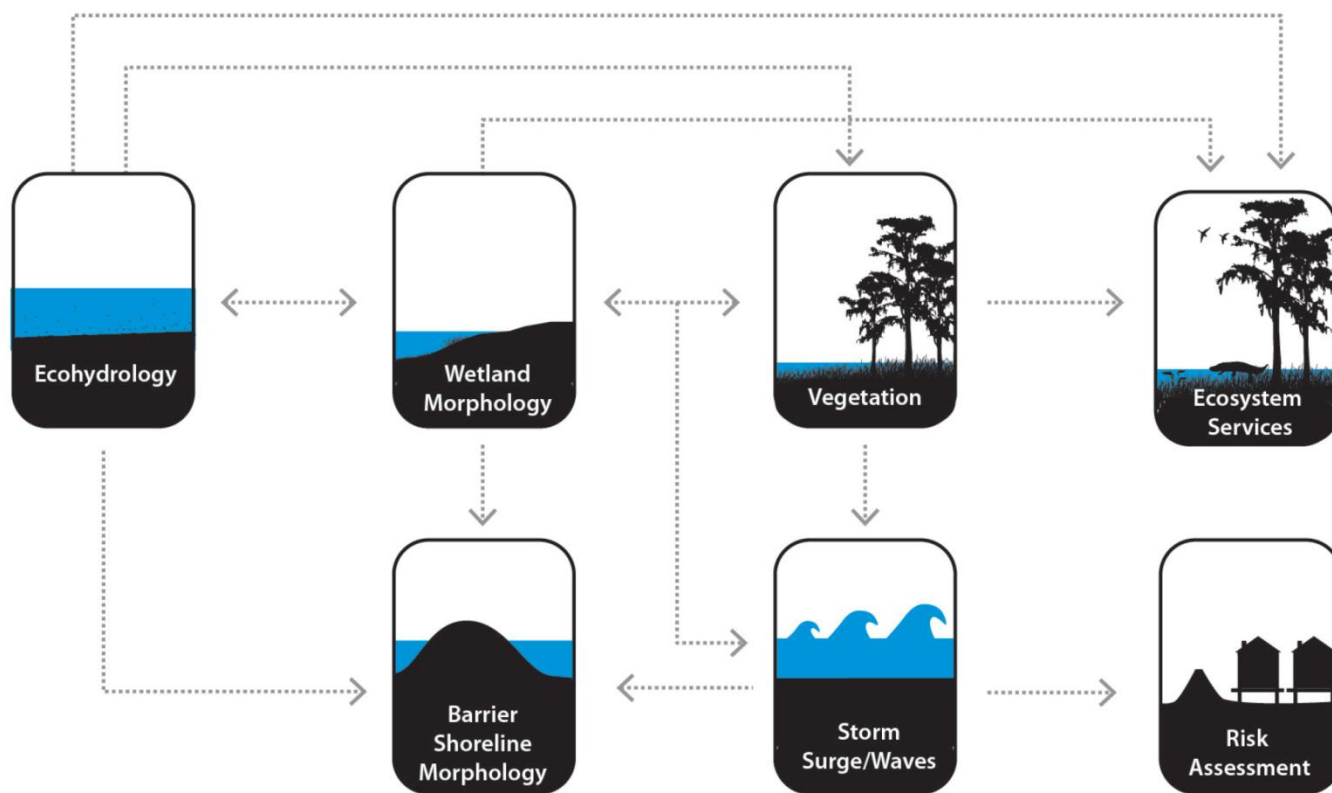


Master Plan Objectives

- 
- Flood Protection** Reduce economic losses from storm-based flooding
 - Natural Processes** Promote a sustainable coastal ecosystem by harnessing the processes of the natural system
 - Coastal Habitats** Provide habitats suitable to support an array of commercial and recreational activities coast wide
 - Cultural Heritage** Sustain Louisiana's unique heritage and culture
 - Working Coast** Provide a viable working coast to support industry

Built on World Class Science and Engineering

- Based on a two-year analysis
- Involving some of the state's best scientists, as well as national and international specialists



Hydrologic Restoration Barrier Island Oyster Barrier Reef Shoreline Protection Bank Stabilization Marsh Creation Combined Project Ridge Restoration Sediment Diversion Channel Realignment Protective Levee **Nonstructural Measure**

Nearly 400 Projects Evaluated Across the Coast

Extensive Public Review and Input



120+
meetings with
citizens, focus groups
elected officials,
stakeholders, &
review teams



Key Decision Points

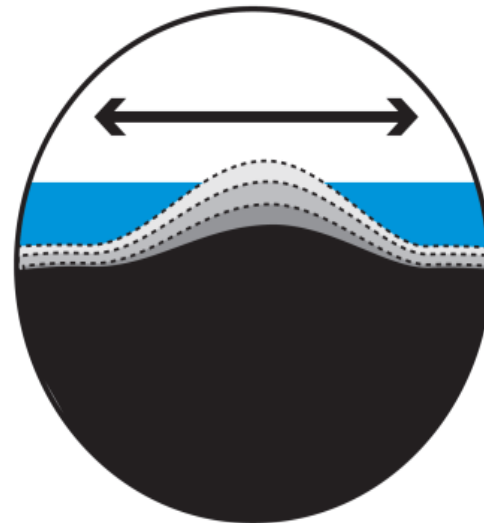
- Flood Risk Reduction and Land Built/Maintained as Decision Drivers

Risk Reduction



Expected Annual
Damages

Restoration



Land Area

Key Decision Points

- Flood Risk Reduction and Land Building as Decision Drivers
- Set a Realistic Budget and Determine Funding Allocation – \$50 Billion, 50/50 split
- Balance Near Term and Long Term Benefits
- Use of Decision Criteria and Ecosystem Services

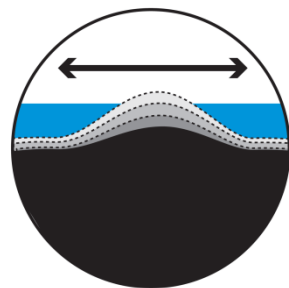
Factors in Making Decision

Risk Reduction



Expected Annual Damages

Restoration



Land Area

Decision Criteria and Ecosystem Services



Distribution of flood risk across socioeconomic groups



Flood protection of historic properties



Flood protection of strategic assets



Operation and maintenance costs



Sustainability



Support for navigation



Use of natural processes



Support for cultural heritage



Support for oil & gas



Oyster



Shrimp



Freshwater Availability



Alligator



Waterfowl



Saltwater Fisheries



Freshwater Fisheries



Carbon Sequestration



Nitrogen Removal



Agriculture/Aquaculture



Other Coastal Wildlife



Nature-Based Tourism

Summary

- Built on world class science and engineering
- Best use of our limited resources
- Identified investments that will pay off, not just for us, but for our children and grandchildren

State of Louisiana
The Honorable Bobby Jindal, Governor



Louisiana's Comprehensive
Master Plan for a Sustainable Coast

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DRAFT JAN 2012



Louisiana's Comprehensive Master Plan for a Sustainable Coast

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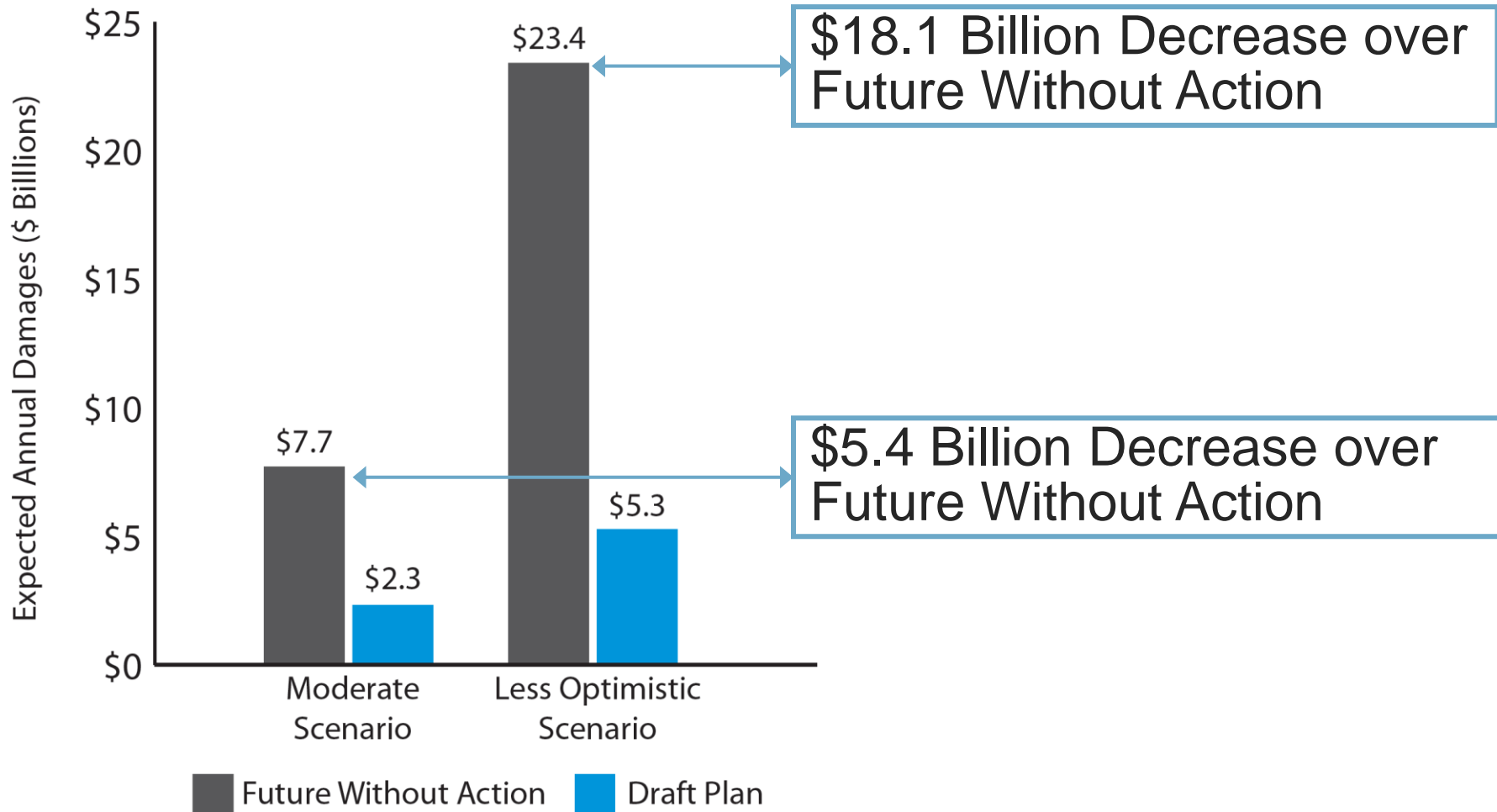
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What the Draft Master Plan Delivers

- Provide some level of protection for every coastal community
- Invests in restoring barrier islands, headlands, and shorelines as first lines of defense against storms

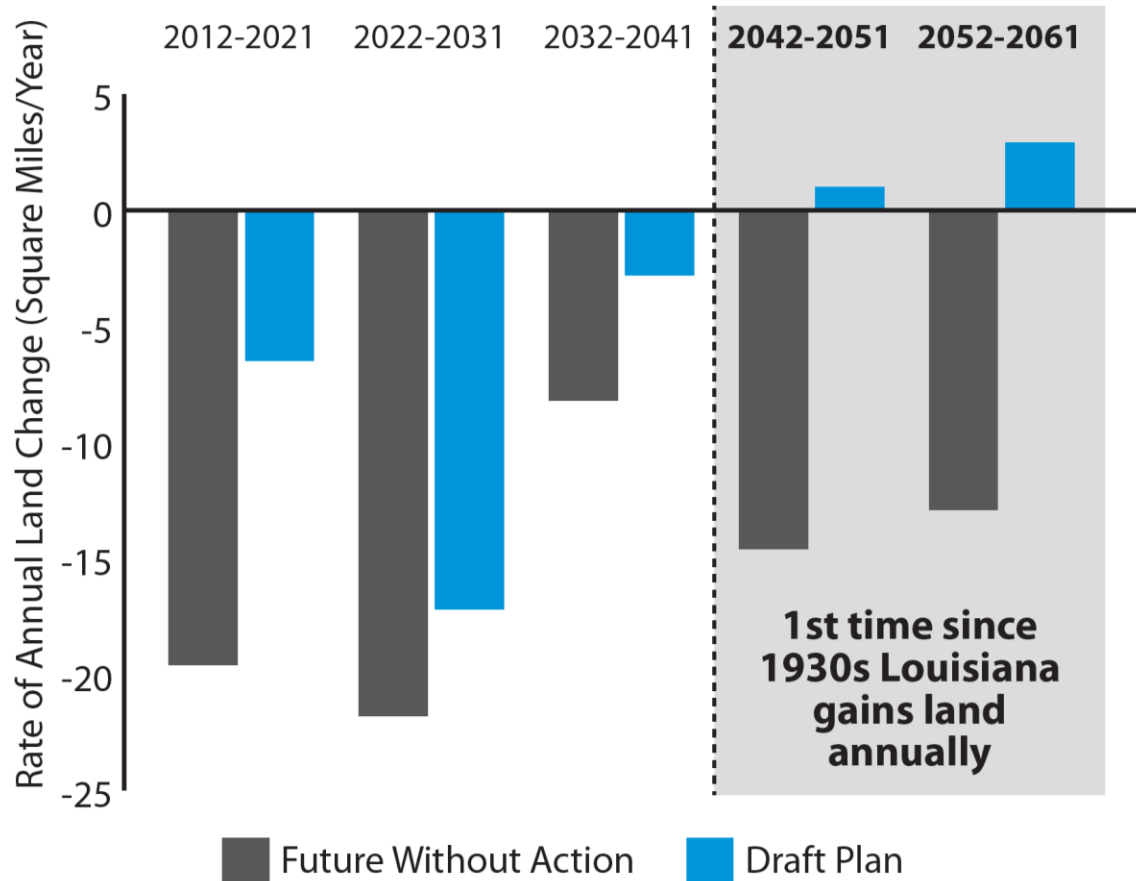


What the Draft Master Plan Delivers



What the Draft Master Plan Delivers

Potential Annual Rates of Land Change over the Next 50 Years



550-850 square miles of land built or maintained over 50 years

1st time since 1930s Louisiana gains land annually

Robust Ecosystem Services

- Analysis found complex increases and decreases in ecosystem services
- Draft plan did not cause drastic changes to species specific habitats coast wide.
 - Shifts in location
 - Substantial level of habitats coast wide to support a wide array of coastal activities



Maintaining our Cultural Heritage

Overview:

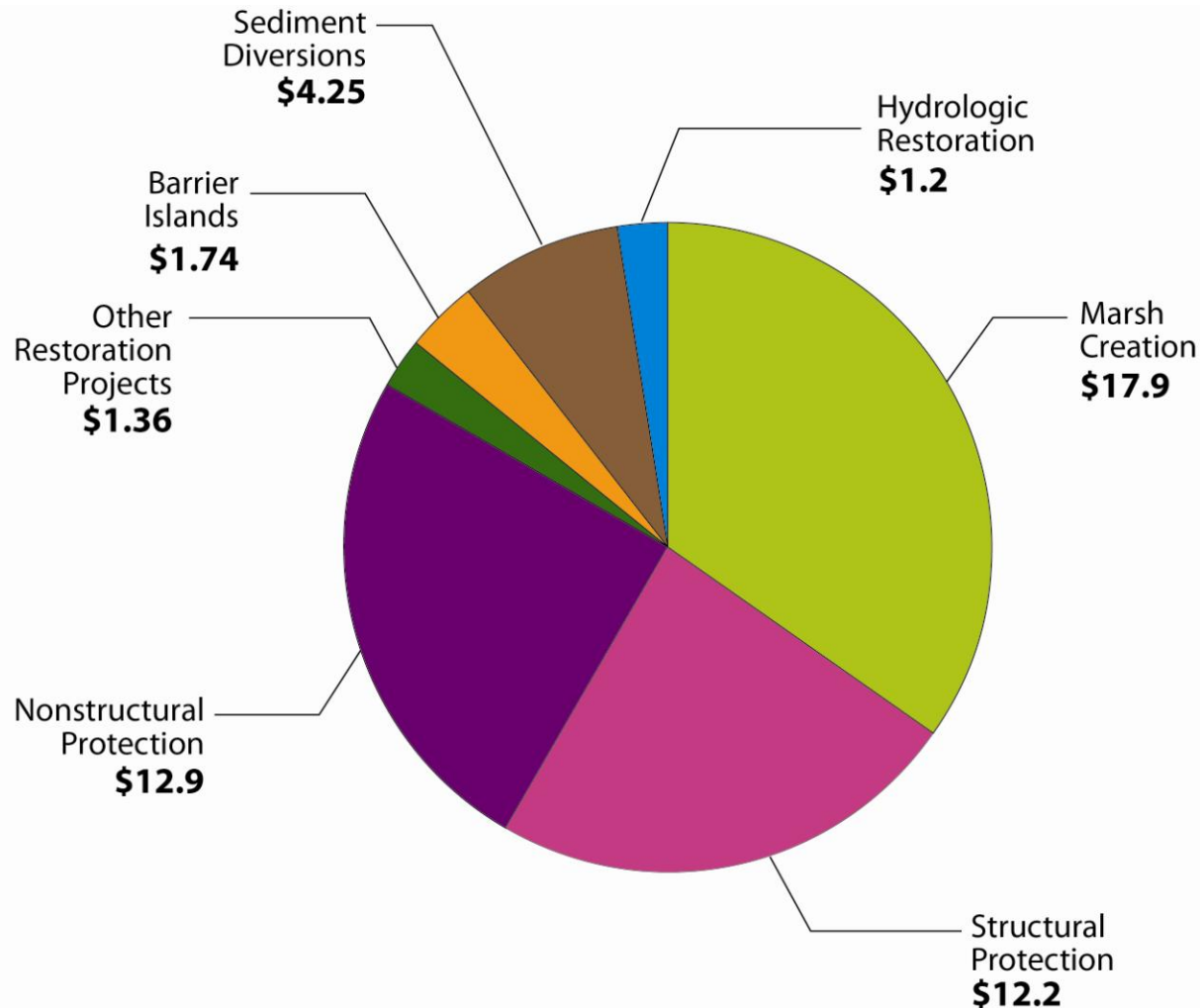
- Analysis focused on assessing whether people are still able to utilize and access important natural resources and live in their traditional communities

Results of the Analysis:

- Results indicate an overall coast wide improvement over Future Without Action
- In no instance does the Draft Plan result in worsening conditions with respect to Future Without Action for a community
- Positive increase in **42 out of the 50 communities** analyzed

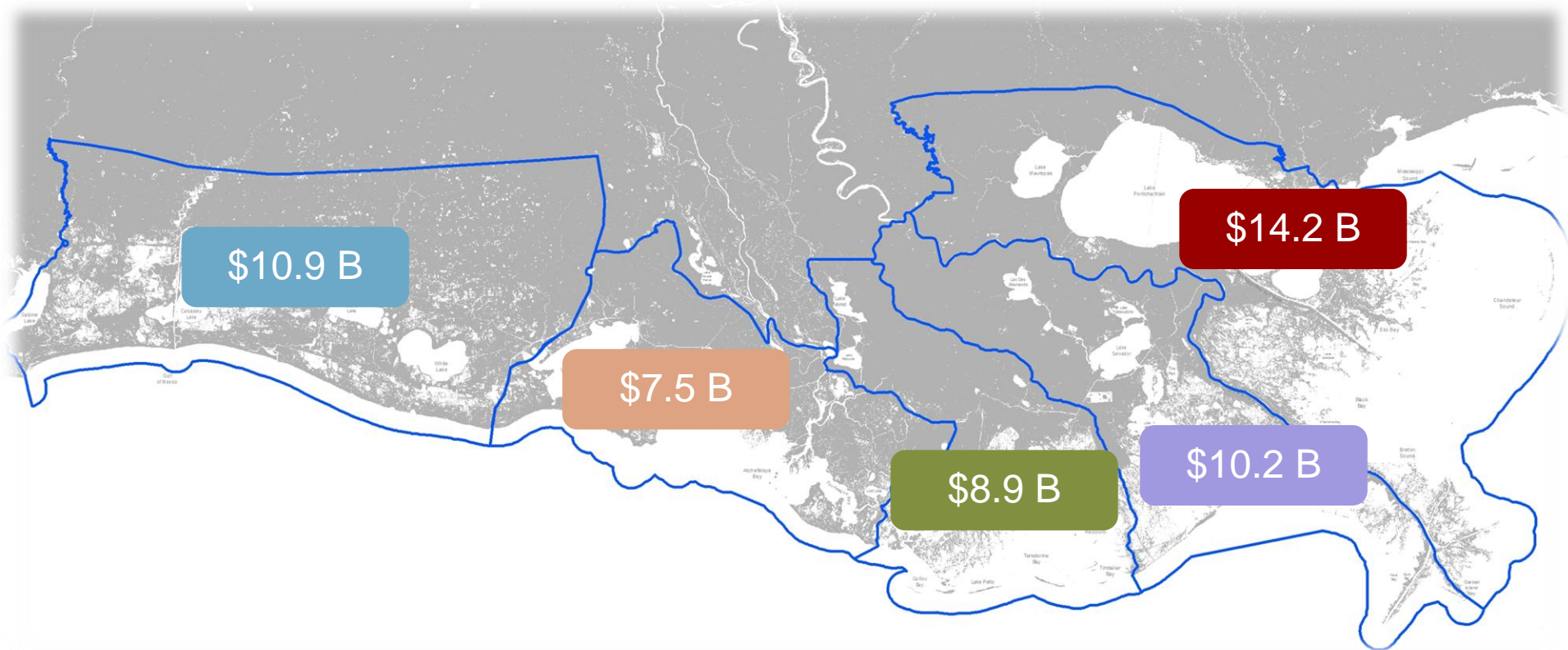
What the Draft Master Plan Delivers

- Includes a wide variety of project types distributed throughout the coast

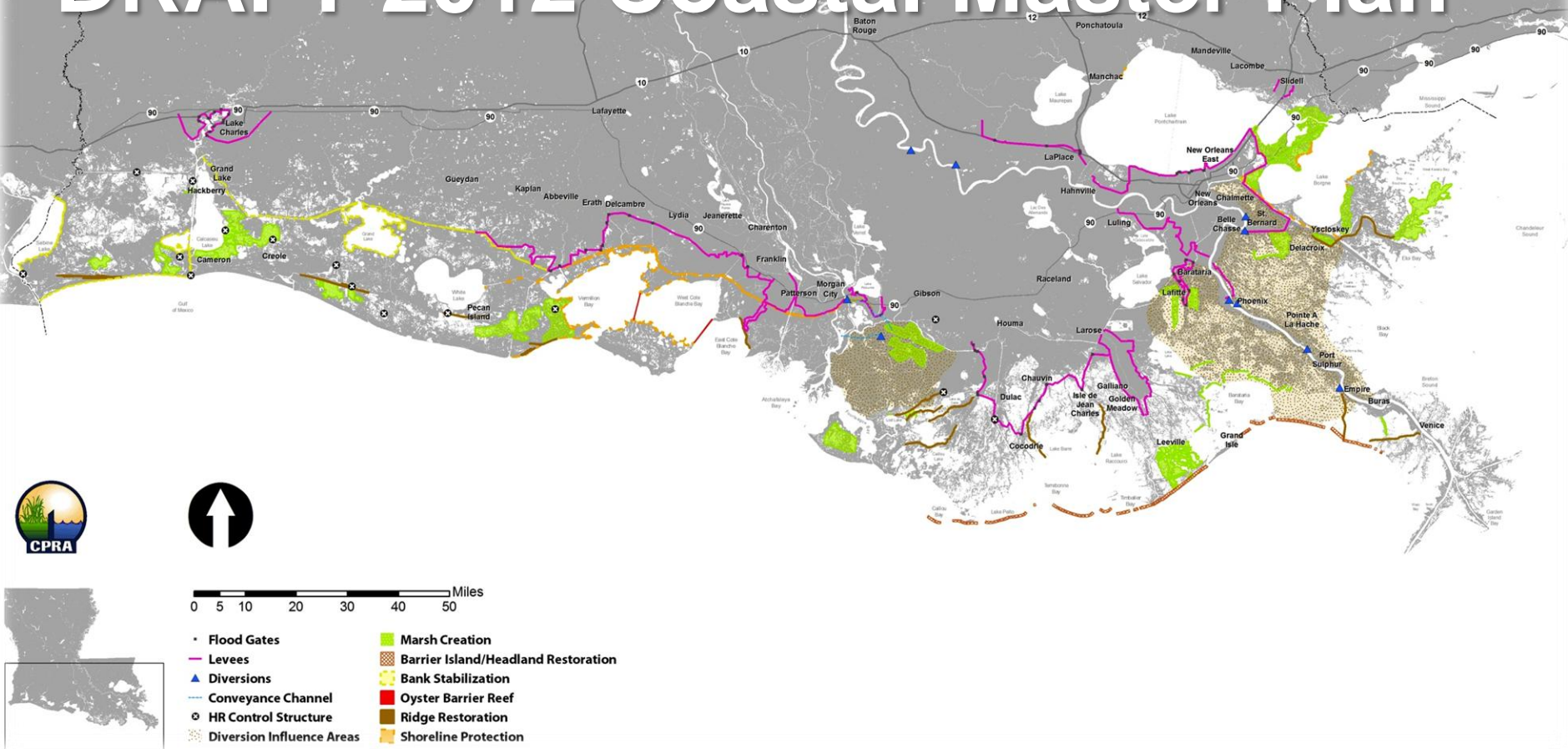


What the Draft Master Plan Delivers

- Includes a wide variety of project types distributed throughout the coast



DRAFT 2012 Coastal Master Plan



145 Projects Totaling Approximately
\$50 Billion over 50 Years

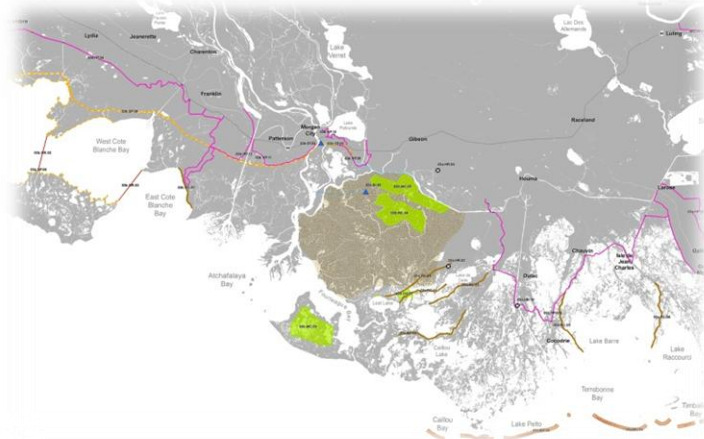
A Closer Look: Southwest Coast

- **Restoration:** Restore wetlands and chenier ridges while limiting saltwater intrusion. Maintain and increase, where possible, the input of fresh water to maintain a balance among saline and fresh wetlands.
- **Protection:** Levees are proposed for the Lake Charles and Abbeville areas. Nonstructural measures are proposed for less populated areas. Restoration of chenier ridges and healthy wetlands contribute additional storm protection.



A Closer Look: Central Coast

- **Restoration:** Maintain the land building capacity of the Atchafalaya region, while increasing the use of sediment and water east to Terrebonne Parish to sustain the coastal ecosystem. Rebuild barrier islands and ridges.
- **Protection:** Levee protection is proposed for Morgan City, Houma, Franklin, and New Iberia. Nonstructural protection measures are proposed for less populated areas. Restoration of the barrier islands, marshes, and ridges contribute additional protection.



Master Plan Outcomes – Central Coast

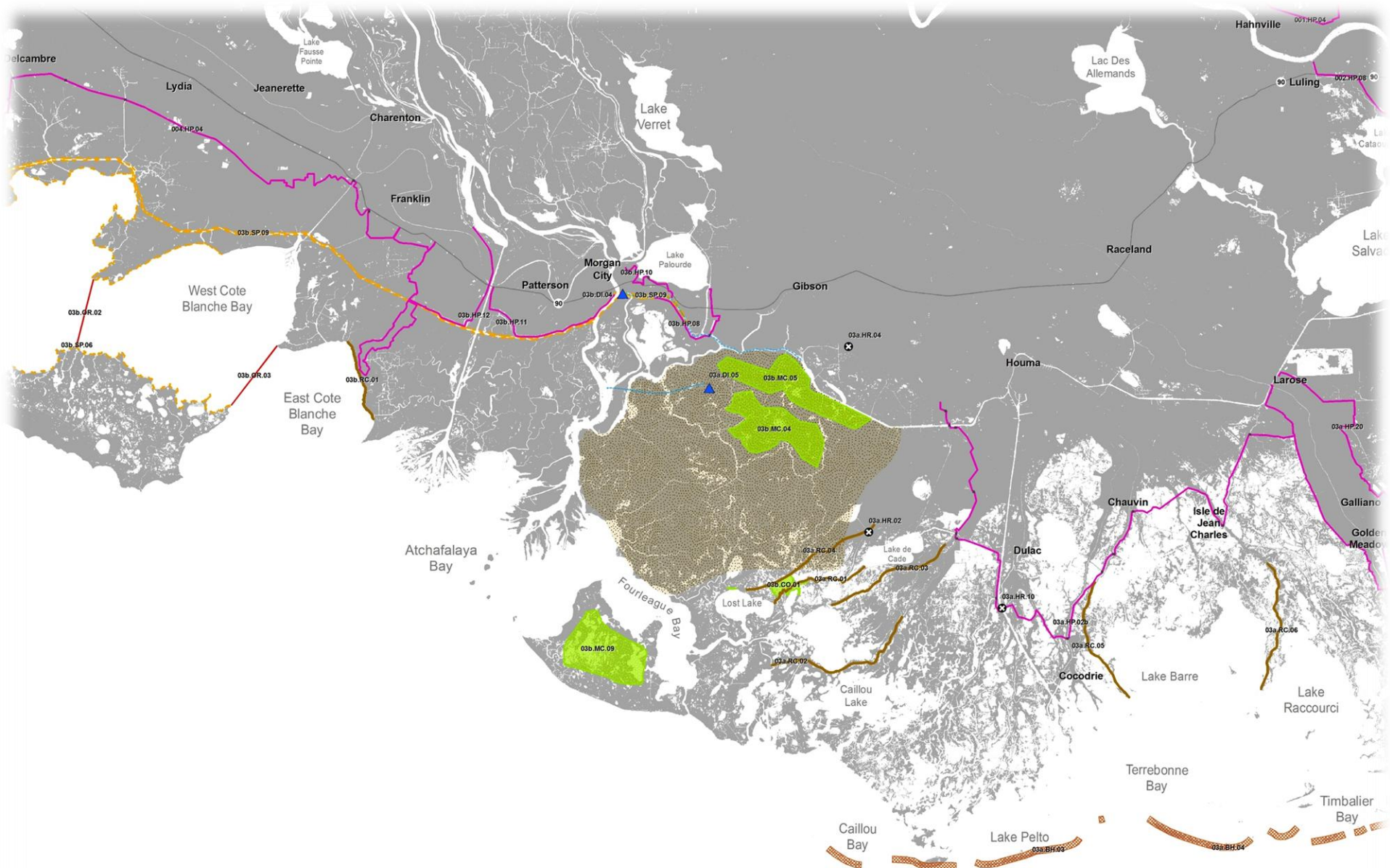
- 32 miles of barrier island/headland projects
- 22 miles of shoreline protection projects
- 9,122 acres of marsh creation projects
- 955 acres or 79 miles in ridge restoration projects

- \$3.8 billion in nonstructural projects
- Nearly \$7 billion in structural protection projects



\$7 BILLION SPENT ON PROTECTION PROJECTS

A Closer Look: Central Coast



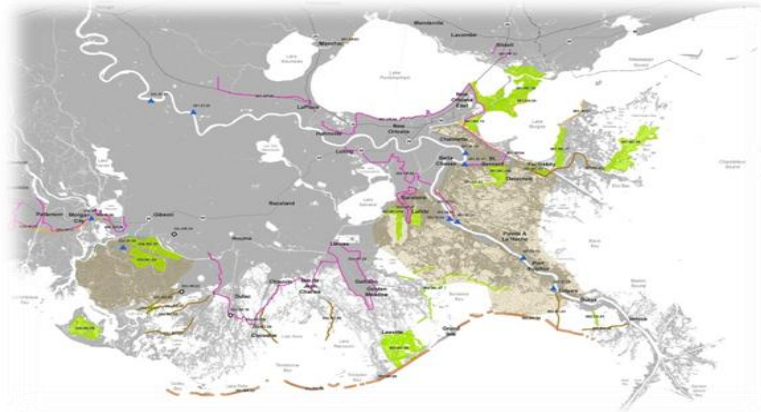
A Closer Look: Southeast Coast

-
- The map illustrates the geographical distribution of three main French dialects in the St. Lawrence Valley. The green-shaded areas represent the Québécois dialect, which is prevalent in the northern and eastern parts of the region, including areas around Saguenay and Gaspésie. The pink-shaded areas represent the Northern French dialect, which is found in the central and western parts of the valley, including areas around Montreal and Quebec City. The brown-shaded areas represent the Standard French dialect, which is primarily located in the southern part of the valley, including areas around the Saguenay and Gaspésie regions. The map also shows major cities, rivers, and lakes, providing a detailed view of the linguistic landscape of the St. Lawrence Valley.

Master Plan Outcomes - Southeast Coast

- 84 miles of shoreline protection & ridge restoration projects
- 57,888 acres of marsh creation projects
- 18,041 acres or 40 miles of barrier island/headland projects
- \$2.2 billion on sediment diversions

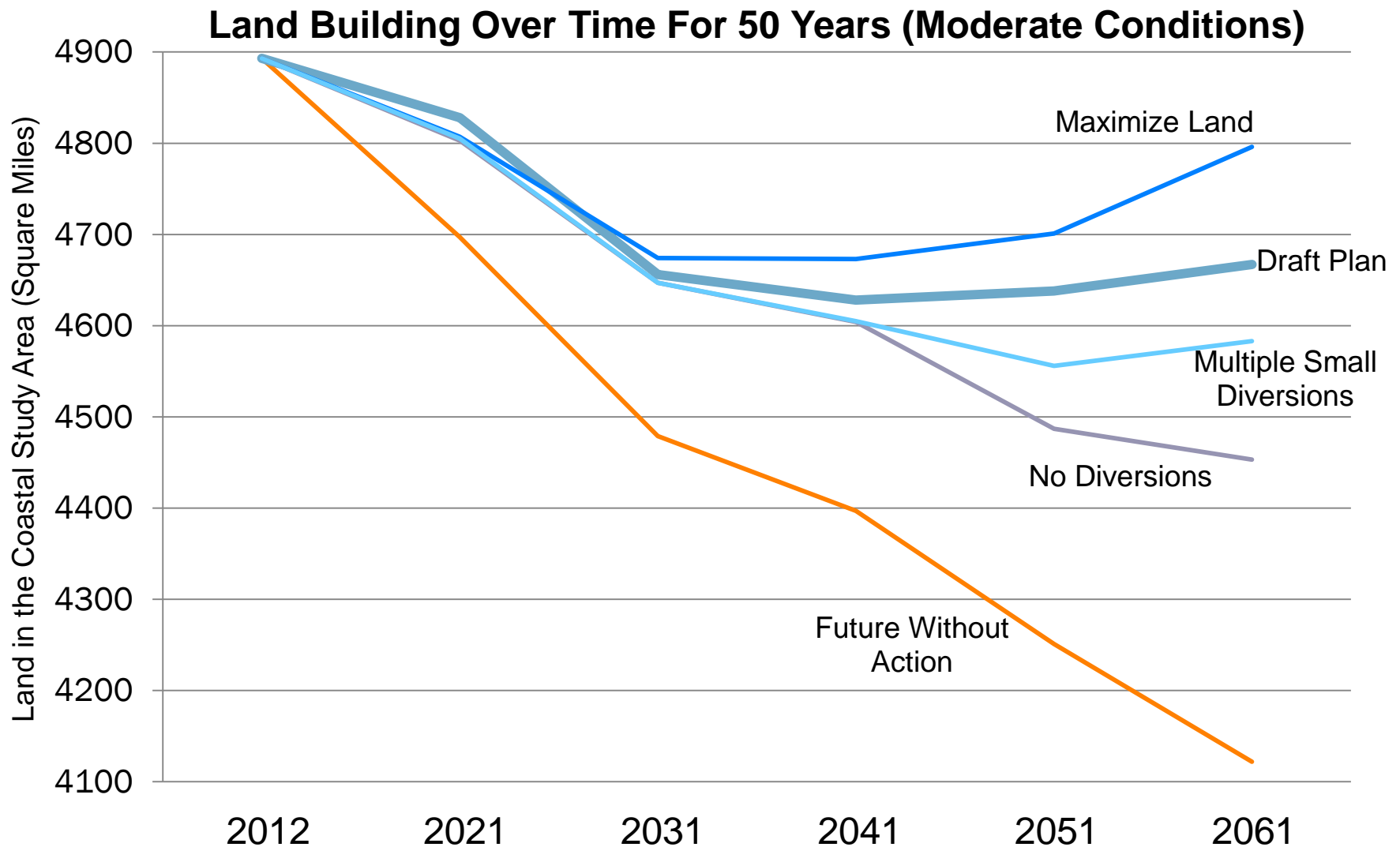
- \$7.5 billion in nonstructural projects
- \$3.8 billion in structural protection projects



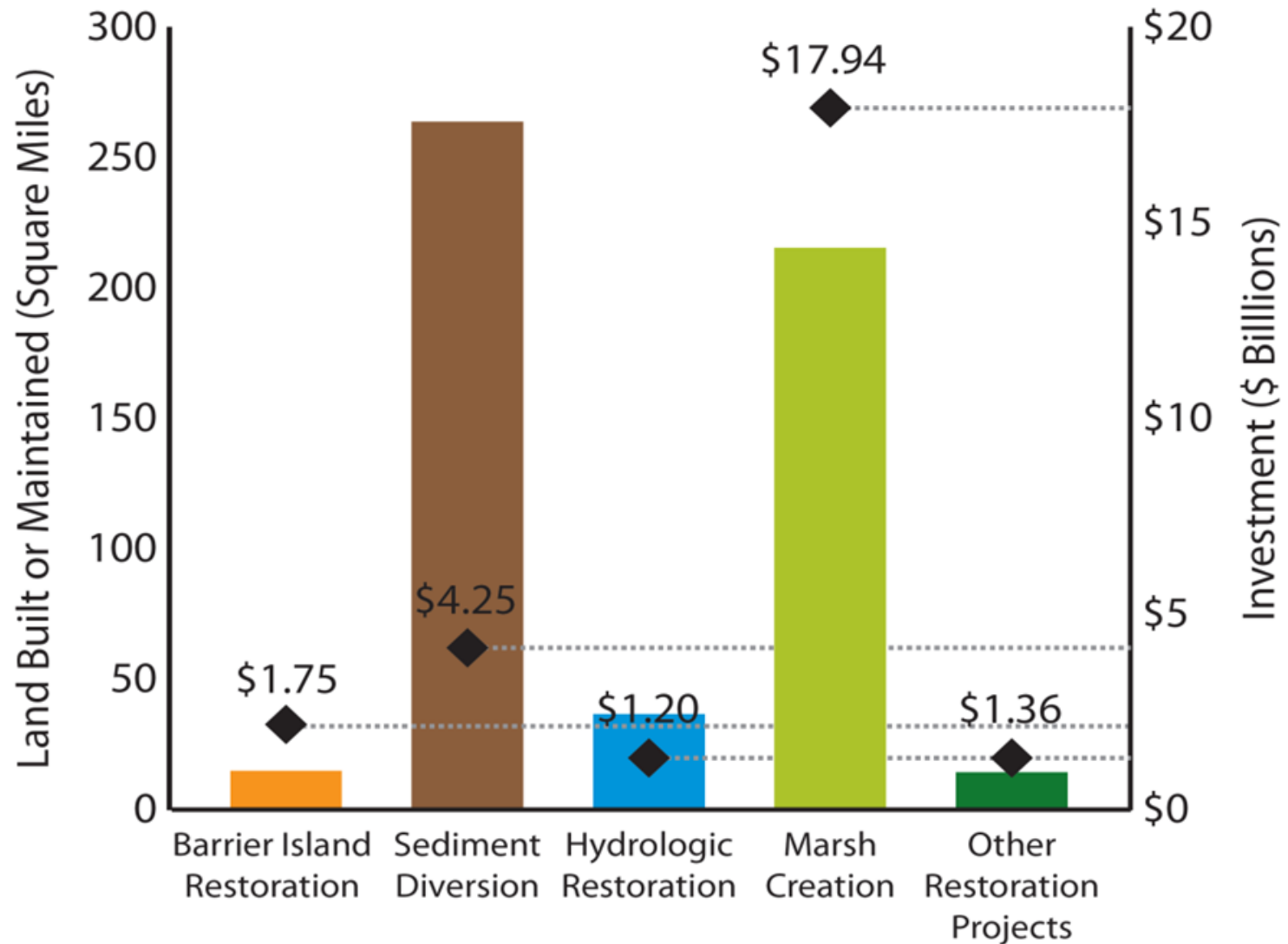
NEARLY 58,000 ACRES OF MARSH CREATION PROJECTS

This map displays the New Orleans area, highlighting various water bodies, land parcels, and infrastructure. The map includes labels for cities such as New Orleans, Slidell, Metairie, and others. Numerous lakes and bays are also labeled, including Lake Maurepas, Lake Pontchartrain, Lake Borgne, and Lake Verret. A network of lines, possibly representing roads or waterways, is overlaid on the map. A legend in the bottom right corner identifies symbols for 'Water', 'Land', 'Road', and 'Waterway'.

Land Building Experiments



Investing in Land Building





Integrated Ecosystem Restoration
and Hurricane Protection in
Coastal Louisiana:

Fiscal Year 2013 Annual Plan

January 2012

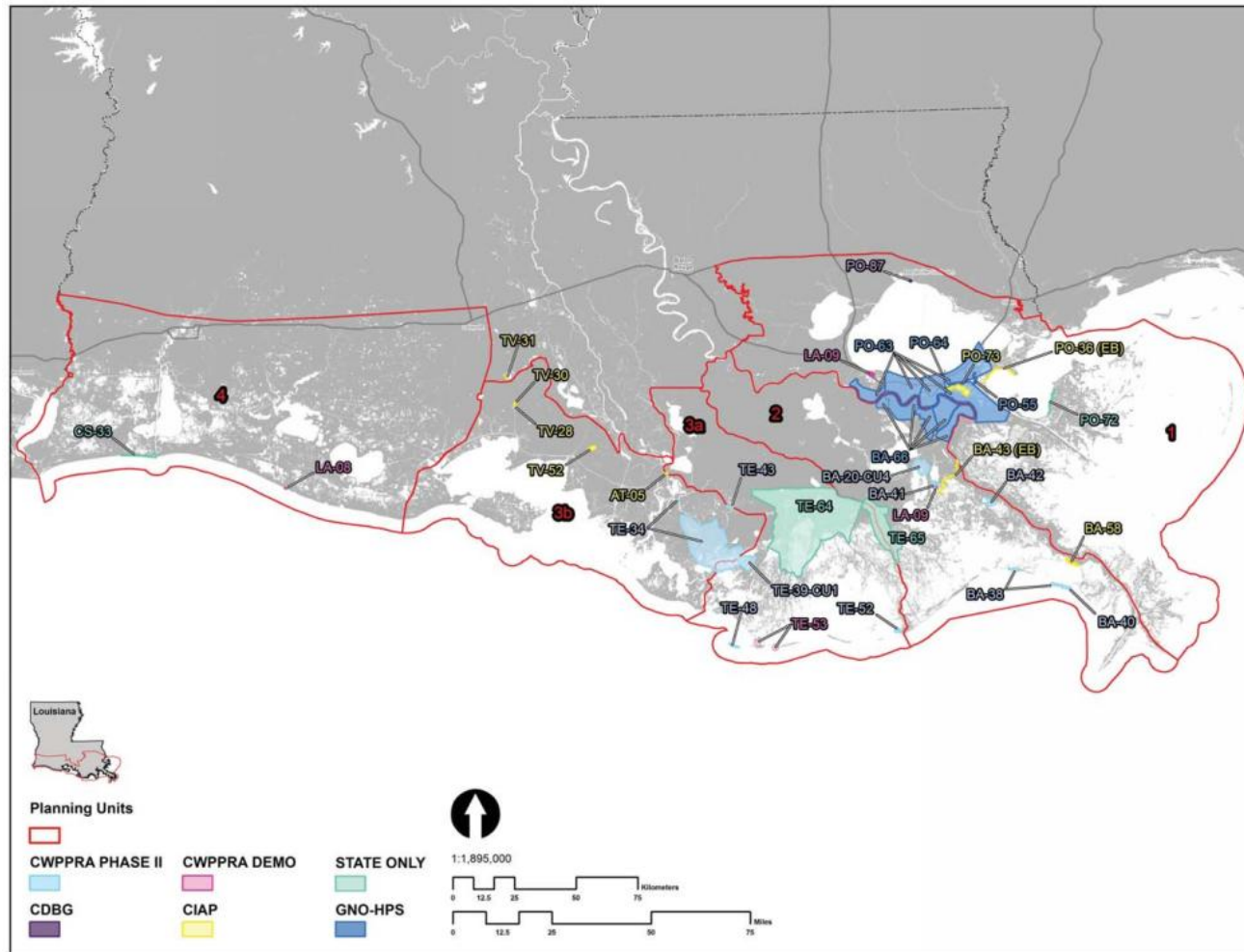
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Legislative Guidance

- Act 8 of the 2005 1st Special Session created the Coastal Protection & Restoration Authority (CPRA).
- Act 8 directs the CPRA to prepare an Annual Coastal Protection and Restoration Plan for submission to the legislature.
- Act 523 requires the Annual Plan to include:
 - a three-year budget,
 - an implementation projection, and
 - a program progress assessment.

FY 2012: Projects in Construction

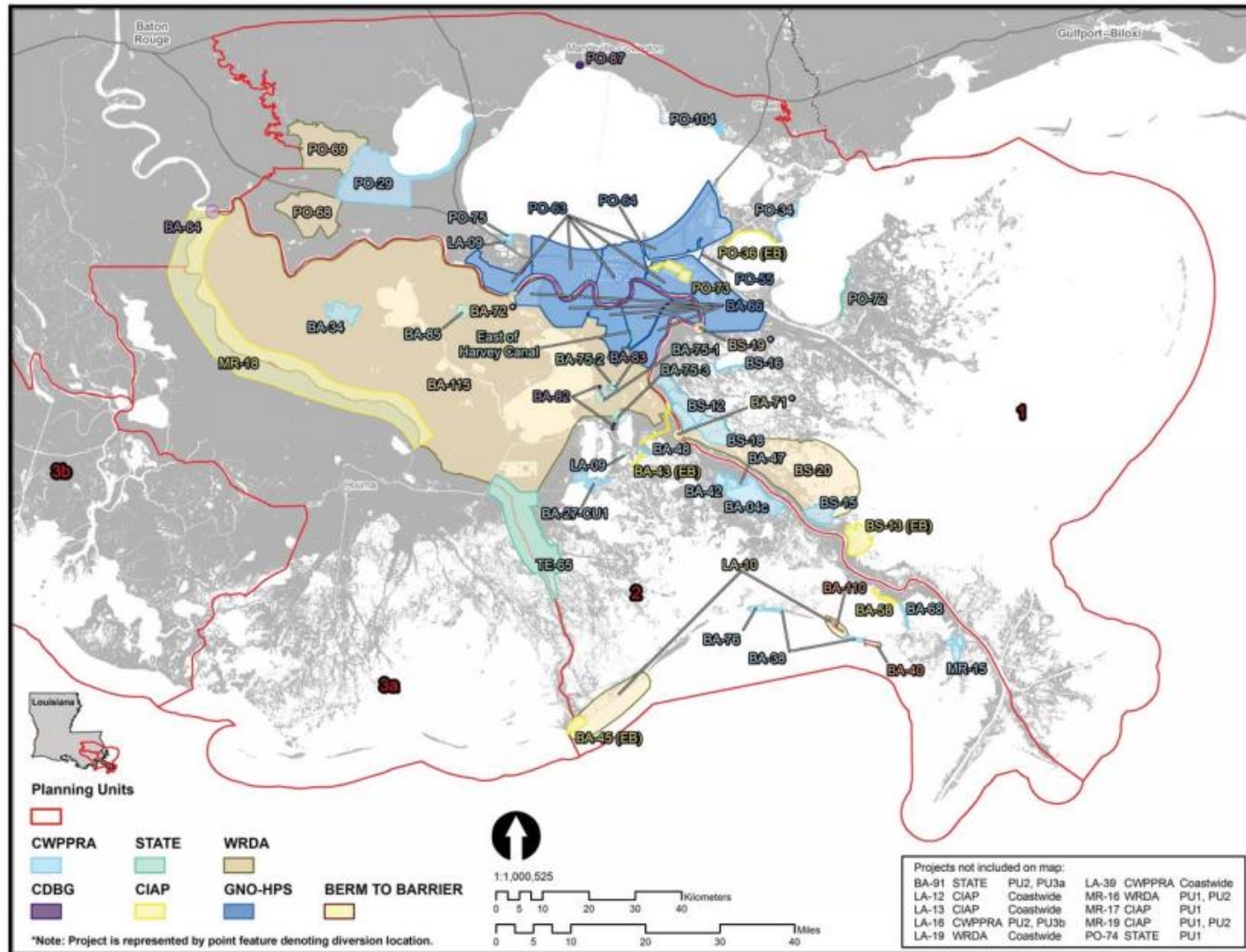


- 31 projects scheduled to begin or continue construction
- 6 projects scheduled to complete construction by end of FY 2012

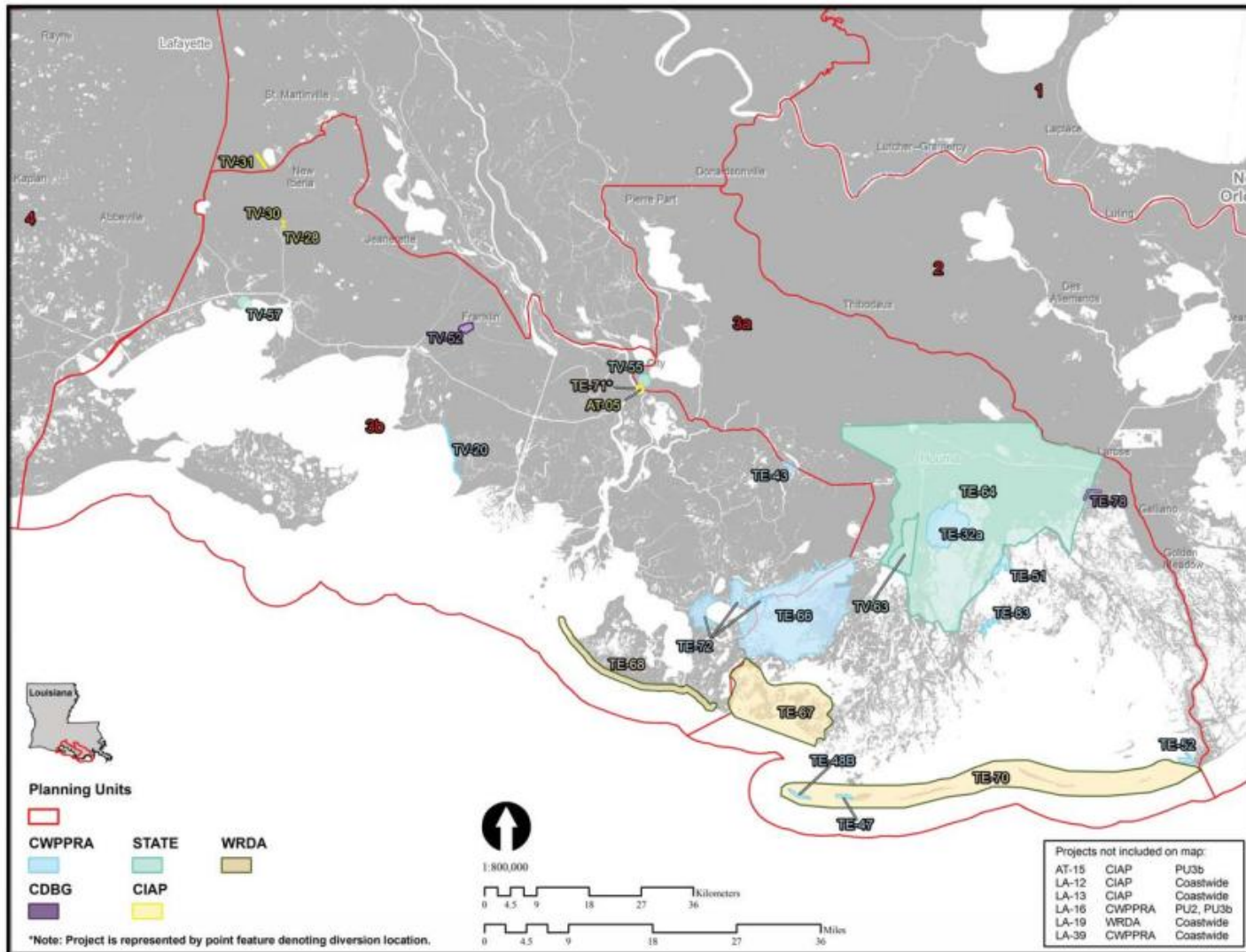
FY 2013 Implementation Plan

- Projects in planning in FY 2013: 9
- Projects in design in FY 2013: 26
- Projects in construction for FY 2013: 50
- Projects funded for O&M in FY 2013: 89
- Projects funded for monitoring in FY 2013: 51

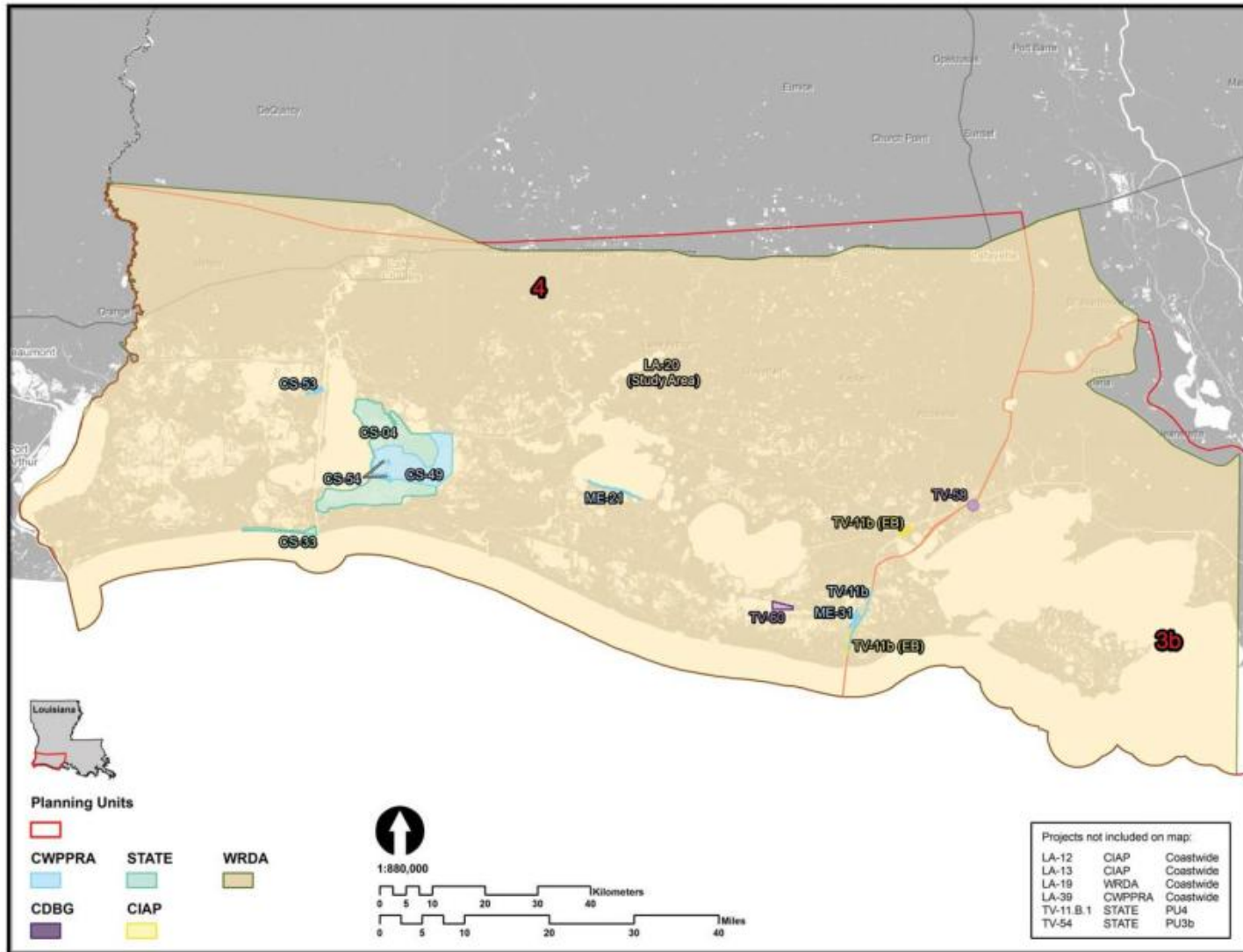
FY 2013: Active Projects (East)



FY 2013: Active Projects (Central)



FY 2013: Active Projects (West)



Projections: FY 2013 – FY 2015 (Schedules)

TABLE 4-8: Projected Three-Year Schedules for Active State-Only Projects (FY 2013 - FY 2015)

Fiscal Year		2013				2014				2015			
Quarter		1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
State ID	Project Name												
TE-65	Larose to Golden Meadow ^{1,2}	F											
CS-33	Cameron Parish Shoreline	C	C	C	F								
TE-64	Morganza to the Gulf ^{1,2}	C	C	C	F								
N/A	East of Harvey Canal Interim Flood Protection ^{1,3}	C	C	C	F								
PO-72	Biloxi Marsh	C	C	C	C	F							
BA-75-1	Jean Lafitte Tidal Protection ^{1,3}	B	C	C	C	F							
BA-85	St. Charles Parish West Bank Hurricane Protection Levee- Phase 1 ^{1,3}	C	C	C	C	C	F						
TV-55	Morgan City/ St Mary Flood Protection ¹	D	D	B	C	C	C	C	C	F			
BA-091	Bayou Lafourche Salt Water Control Structure	D	D	D	B	C	C	F					
BA-75-2	Rosethorne Tidal Protection ^{1,3}	D											
TV-57	Delcambre-Avery Canal (E&D)	D	D	D	D	D							
TV-54	South Central Coastal Plan	P	P	P	P	P	P	P	P	P	P		
TV-11.B1	Acadiana to the Gulf of Mexico Access Channel ⁴	P	P	P	P	P	P	P	P	P	P	P	P
BA-75-3	Lafitte Tidal Protection ¹	O	O	O	O	O	O	O	O	O	O	O	O
CS-04a	Cameron Creole Maintenance	O	O	O	O	O	O	O	O	O	O	O	O
TV-56	Four-Mile Canal Storm Surge Reduction Construction ^{1,5,6}												

Legend

1 Project to be implemented by local parish/levee district.

2 Schedule represents State-funded construction only; local construction may continue beyond end date.

3 Project transferred from DOTD to CPRA.

4 Project involves planning support for a project to be constructed by LaDOTD and the USACE.

5 Project design to be funded by HMGP.

6 Project on hold pending results of modeling to determine appropriate structure location.

P	Feasibility & Planning
D	Engineering & Design
W	Completed Design Projects; Awaiting Construction Funding

C	Construction
B	Both Design & Construction
F	Completed Const. Projects
I	Program Implementation
O	OM&M

- Example Three-Year Schedule Projections

Projections: FY 2013 – FY 2015 (Revenue)

TABLE 4-1: Projected Three-Year Revenues (FY 2013 - FY 2015)

Revenue Sources	FY 2013	FY 2014	FY 2015	Program Total (FY 2013 - FY 2015)
CPR Trust Fund Annual Revenue ¹	\$33,971,465	\$35,000,000	\$35,000,000	\$103,971,465
GOMESA ¹	\$222,725	\$222,725	\$222,725	\$668,175
DOTD Interagency Transfer ¹	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
CIAP	\$60,108,888	\$99,766,854	\$21,180,512	\$181,056,254
Surplus '07, '08, '09	\$367,982,795	\$92,992,151	\$2,867,485	\$463,842,431
Hazard Mitigation Grant Program ²	\$83,000,000	\$0	\$0	\$83,000,000
Community Development Block Grants	\$7,586,739	\$12,993,125	\$222,989	\$20,802,853
Berm to Barrier ³	\$64,410,748	\$20,374,590	\$0	\$84,785,338
NRDA Early Restoration ⁴	\$267,423,000	\$269,777,000	\$0	\$537,200,000
LDNR Mitigation Funds ⁵	\$768,564	\$0	\$0	\$768,564
FEMA RiskMAP Funding ⁶	\$200,000	\$200,000	\$200,000	\$600,000
FEMA Reimbursement for OM&M	\$1,025,000	\$0	\$0	\$1,025,000
Project Billing	\$15,000,000	\$18,000,000	\$20,000,000	\$53,000,000
Total Projected Revenue	\$905,699,924	\$553,326,445	\$83,693,712	\$1,542,720,080

Notes:

1- Annually recurring revenue source.

2- HMGP project schedules are currently under development pending FEMA approval; HMGP funds will be allocated according to project schedules.

3- Berm to Barrier project schedules are currently under development and may be refined at a later date; funds will be distributed according to final project schedules.

4- Expenditures represent early restoration under the Early Restoration Framework Agreement announced on April 21, 2011 and are based on the Louisiana Plan announced by Governor Jindal in July 2011. Negotiations with BP are ongoing and Louisiana expects to receive additional (early and long-term) NRDA funds but, the timing of receipt of these funds is highly uncertain.

5- Used to partially fund TV-11B (EB).

6- Used to management of FEMA's RiskMAP program and to partially fund RiskMAP's outreach program.

Projections: FY 2013 – FY 2015 (Expenditures)

TABLE 4-2: Projected Three-Year Expenditures¹ (FY 2013 - FY 2015)

Program/Funding Source	FY 2013	FY 2014	FY 2015	Program Total (FY 2013 - FY 2015)
CWPPRA Projects (not including Surplus expenditures) ²	\$12,833,540	\$20,000,000	\$20,000,000	\$52,833,540
WRDA Projects (not including Surplus or CIAP expenditures)	\$7,535,524	\$4,049,931	\$2,975,767	\$14,561,222
CIAP Projects and Programs (not including Surplus Expenditures)	\$60,108,888	\$99,766,854	\$21,180,512	\$181,056,254
Surplus Projects and Programs	\$367,982,795	\$92,992,151	\$2,867,485	\$463,842,431
Community Development Block Grants	\$7,586,739	\$12,993,125	\$222,989	\$20,802,853
Hazard Mitigation Grant Program ³	\$83,000,000	\$0	\$0	\$83,000,000
GNO-HPS 30-Year Payback ⁴	\$0	\$40,100,000	\$63,800,000	\$103,900,000
State-Only Projects (Non-Surplus)	\$723,481	\$2,879,336	\$0	\$3,602,817
Berm to Barrier	\$64,410,748	\$20,374,590	\$0	\$84,785,338
NRDA Early Restoration ⁵	\$267,423,000	\$269,777,000	\$0	\$537,200,000
LDNR Mitigation Expenditures ⁶	\$768,564	\$0	\$0	\$768,564
OM&M- Projects (not including Surplus or CIAP expenditures)	\$9,830,530	\$13,910,951	\$7,762,337	\$31,503,818
OM&M- Marine Debris Removal (FEMA)	\$1,025,000	\$0	\$0	\$1,025,000
Support and Project Development	\$7,500,000	\$7,500,000	\$7,500,000	\$22,500,000
Operating Costs (see Tables 4-3 and 4-4)	\$32,295,607	\$48,423,842	\$50,197,737	\$130,917,186
Total Planned Expenditures	\$923,024,416	\$632,767,780	\$176,506,827	\$1,732,299,023

Notes:

1- Represents proposed expenditures provided that commensurate level of funding is received.

2- Because CWPPRA projects compete for funding annually, CWPPRA expenditures as presented in Appendix B (which include projected expenditures for approved projects only) do not adequately capture likely CWPPRA expenditures in outlying years. The State's estimated CWPPRA expenditures for FY 2014 - FY 2015 are therefore based on prior years' expenditures.

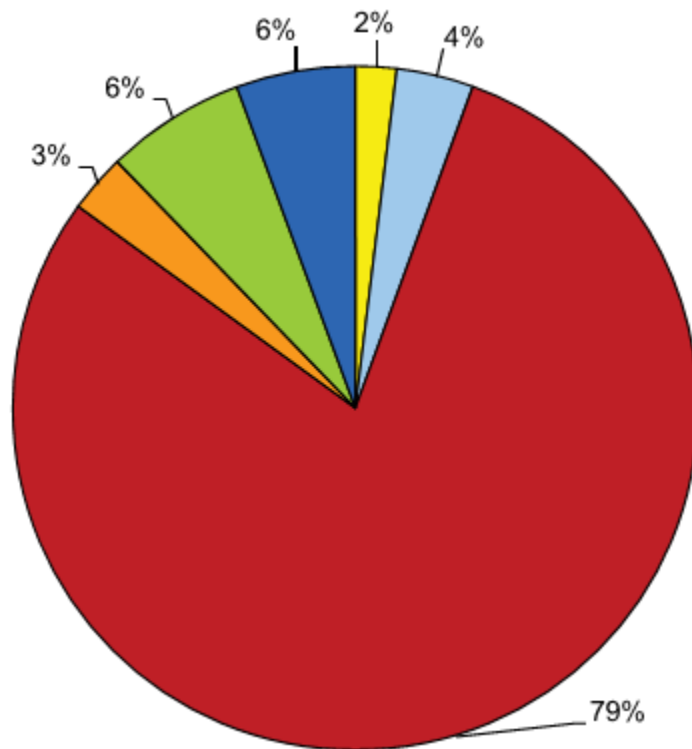
3- HMGP project schedules are currently under development pending FEMA approval; HMGP funds will be allocated according to project schedules.

4- Payback is based on current GNO-HPS construction schedule; payback will not commence until completion of GNO-HPS construction activities and consequently payback schedule may be revised at a later date.

5- Expenditures represent early restoration under the Early Restoration Framework Agreement announced on April 21, 2011 and are based on the Louisiana Plan announced by Governor Jindal in July 2011. Negotiations with BP are ongoing and Louisiana expects to receive additional (early and long-term) NRDA funds but, the timing of receipt of these funds is highly uncertain.

6- Used to partially fund TV-11B (EB).

Projections: FY 2013 Expenditures by Phase



■ Planning (\$11.1 million)

■ Engineering and Design (\$20.8 million)

■ Construction (\$454.8 million)

■ Operation, Maintenance and Monitoring (\$15.8 million)

■ Ongoing Programs and Initiatives (\$37.8 million)

■ Operating Costs (\$32.3 million)

Total Expenditures \$573 million

OM&M includes BIMP (\$3.39 million), Repair/Rehabilitation of Projects (\$1 million) and Marine Debris Removal (\$8.7 million)

Ongoing Programs includes Support and Project Development (\$7.5 million)

Total excludes HMGP (\$83 million) and NRDA Early Restoration (\$267.4 million)



Public Comment Period

Next Steps – Master Plan and Annual Plan

- JAN 23-25 – Public Meetings
- **FEB 25 – Public Comment Period Ends**
- MAR 21 – CPRA Reviews Final Plans
- MAR 26 – Plans Submitted to Legislature



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How to Submit Public Comments

- Submit public statement request form and speak tonight
- Submit comments in writing today
- Mail your comments to:
The Coastal Protection and Restoration Authority
P.O. Box 44027
Baton Rouge, LA 70804
- Submit comments online at:
coastalmasterplan.la.gov
- Email us at: masterplan@la.gov



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Public Comments

- In order to speak, please turn in a public request statement form. Please raise your hand if you need one
- Public comments will be limited to 3 minutes
 - 1 minute, 30 second, and Times Expired cards will be displayed



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Public Comments

